CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 78-64

WASTEWATER RECLAMATION REQUIREMENTS FOR:

CITY AND COUNTY OF SAN FRANCISCO
LOG CABIN RANCH SCHOOL
LA HONDA, SAN MATEO COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, finds that:

1. The City and County of San Francisco, hereinafter referred to as the discharger, submitted a report of waste discharge dated April 12, 1978.

2. The discharger presently discharges an annual average of 12,000 gallons per day of secondarily treated domestic wastewater from its Log Cabin Ranch School treatment facilities into a holding pond located within the discharger's property. During the dry weather period water is withdrawn from the pond for the purpose of spray irrigation of a ballfield. Since the pond is also used as a reservoir for the fire fighting system, it is necessary to add fresh water during dry weather to maintain an adequate water supply therein. During the wet weather period water is withdrawn occasionally from the pond and sprayed on hilly pasture land adjacent to the ballfield in order to maintain the pond level. The ballfield and adjacent pasture land is located within the discharger's property.

3. It is estimated that the holding pond presently overflows approximately once each year during heavy rainfall, resulting in discharge to waters of the State. The discharger has proposed to eliminate such discharge by means of physical changes to the lagoon system such as additional diking and diversion of rainwater runoff.

4. Section 13523 of the California Water Code provides that a regional board, after consulting with and receiving the recommendations of the State Department of Public Health, and if it determines such action to be necessary to protect the public health, safety, or welfare, shall prescribe water reclamation requirements for water which is used or proposed to be used as reclaimed water. The use of reclaimed water for the purposes specified in Paragraph 2, could affect the public health, safety, or welfare, and requirements for those uses are therefore necessary in accordance with the Water Code.

5. The Board adopted a Water Quality Control Plan for San Francisco Bay Basin in April 1975. The water quality objectives for reclaimed wastewater, as set forth in the Basin Plan, specify those limits prescribed in Title 17, Section 8025 through 8050, California Administrative Code. These objectives have been superseded by Title 22, Sections 60301 - 60357, California Administrative Code (statewide reclamation criteria).

6. The wastewater reclamation requirements are in conformance with the statewide reclamation criteria established by the State Department of Health.

7. The proposed use of reclaimed wastewater involves a minor alteration to land and as such is exempt from the provisions of the Environmental Quality Act of 1970 as a Class 4 exemption pursuant to Section 15104 of the California Administrative Code (State EIR Guidelines). The project will not have a significant effect on the environment.

8. This Regional Board has notified City and County of San Francisco and interested agencies and persons of its intent to prescribe water reclamation requirements for the proposed uses.

9. This Board at a public meeting heard and considered all comments pertaining to this reuse.

IT IS HEREBY ORDERED, that the City and County of San Francisco, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following:

A. Reclaimed Wastewater Use Specifications

1. The treatment, distribution or application of reclaimed water shall not create a nuisance as defined in Section 13050(M) of the California Water Code.

2. The reclaimed water shall be at all times an adequately disinfected, oxidized water and shall meet the following quality limits at all times:

5-day BOD	30.0 mg/l maximum
Chlorine residual	1.0 mg/l, minimum
Dissolved Oxygen	2.0 mg/l, minimum
Dissolved Sulfide	0.1 mg/l, maximum
Coliform Organisms	Median MPN shall not exceed 2.2 coliform organisms per 100 milliliters of sample at some point in the treatment process. The median value will be determined from the bacteriological results of the last seven (7) analyses.

3. All above ground equipment, including pumps, piping and valves, etc., which may at any time contain waste shall be adequately and clearly identified with warning signs and user shall make all necessary provisions, in addition, to inform affected persons that the liquid contained in reclamation equipment and storage pond is sewage and is unfit for human consumption.

B. Reclaimed Wastewater Use Prohibitions

1. No wastewater shall be applied to the disposal area during periods of rainfall or when soils are saturated.

2. No reclaimed wastewater applied to the disposal areas shall be allowed to escape to areas outside the discharger's property, either by surface flow or airborne spray, except for minor quantities occurring as a result of careful irrigation practice.

3. Wastewater shall not be applied to disposal areas in such a manner or at such times as to expose individuals to contact with spray droplets.

4. Discharge of waste from the holding pond, other than to the land disposal system is prohibited.

C. Provisions

1. This Board's Resolution No. 790, adopted on October 20, 1966 is hereby rescinded.

2. The discharger shall comply with all Reclaimed Wastewater Use Specifications and Prohibitions of this Order immediately upon adoption.

3. The discharger shall submit to this office by November 1, 1978 a report on measures taken to secure compliance with Prohibition B.4.

4. This Order includes items 1, 2, 4, 5, and 10 of the attached "Requirements of Design for Reclamation Facilities" dated October 1, 1975.

5. The discharger shall file with the Regional Board technical reports on self-monitoring work performed according to detailed specifications as directed by the Executive Officer.

6. The discharger shall permit the Regional Board or its authorized representative:

   a. Entry upon premises in which an effluent source is located or in which any required records are kept.

   b. Access to copy any records required to be kept under terms and conditions of this Order.

   c. Inspection of any monitoring equipment or method required by this Order.

   d. Sampling of any discharge.

7. The discharger shall maintain in good working order and operate as efficiently as possible any facility or control system installed by the user to achieve compliance with the water reclamation requirements.

8. The discharger shall file with the Regional Board a report on waste discharge at least 180 days before making any material change or proposed change in the character, location, or volume of reuse.

I, Fred H. Dierker, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on August 15, 1978

FRED H. DIERKER
Executive Officer

Attachments:
Requirements of Design for
Reclamation Facilities dated 10/1/75
Self-Monitoring Program
Guidelines for Worker Protection at
Water Reclamation Use Areas

by LAWRENCE P. KOLB
Acting Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM
FOR

City and County of San Francisco

Log Cabin Ranch School

La Honda, San Mateo County

ORDER NO. 78-64

CONSISTS OF

PART A

AND

PART B

PART B

I. DESCRIPTION OF SAMPLING STATIONS AND SCHEDULE OF SAMPLING, ANALYSES AND OBSERVATIONS

Analyses, observations, and examinations shall be performed according to the specifications shown in Table I.

A. EFFLUENT

Station	Description
E-001	At any point in the reclaimed wastewater conveyance line between the point of discharge into the holding pond and the point at which all wastewater tributary to that line is present.
E-001-D	At any point in the disinfection facilities for Waste E-001 at which point adequate contact with the disinfectant is assured. (May be the same as E-001.)

B. LAND OBSERVATIONS

Station	Description
L-1 thru L-'n'	Located along the periphery of the reclaimed wastewater disposal areas at equidistant intervals, not to exceed 500 feet.

C. IMPOUNDMENT FACILITIES

Station	Description
P-1 thru P-'n'	Located along the perimeter levees of the pond containing reclaimed wastewaters at equidistant intervals not to exceed 100 feet.
R	At some point on the periphery of the pond containing reclaimed wastewaters.

(A sketch showing the locations of these stations should accompany each report.)

II. MISCELLANEOUS REPORTING

A. The discharger shall phone the Executive Officer immediately upon detecting a violation of any reclaimed water use specifications or prohibitions.

B. The discharger shall submit with the first required monitoring report, adequate documentation that all equipment is adequately marked as required. Such documentation shall include, but not be limited to photographs and certification of compliance.

I, Fred H. Dierker, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 78-64

2. Does not include the following paragraphs of Part A:

   C-1, C-3, C-4, C-5c, D-1, F-1

3. Has been ordered by the Executive Officer on August 15, 1978 and becomes effective immediately.

4. May be reviewed at any time subsequent to the effective date upon written notice from either the Executive Officer or the discharger, and will be revised upon written agreement of the Executive Officer and the discharger.

FRED H. DIERKER
Executive Officer

Attachment:
Table I

by LAWRENCE P. KOLB
Acting Executive Officer

TABLE I

SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

Sampling Station	E-001		E-001-D		All L Sta.		All P Sta.		R				
TYPE OF SAMPLE	Grab		Grab		Observa-tion		Observa-tion		Grab				
Flow Rate (mgd)	D												
BOD, 5-day, 20° C, or COD (mg/l & kg/day)	W												
Chlorine Residual & Dosage (mg/l & kg/day)			D										
Settleable Matter (ml/1-hr. & cu. ft./day)													
Total Suspended Matter (mg/l & kg/day)													
Oil & Grease (mg/l & kg/day)													
Coliform (Total) (MPN/100 ml) per req't			2/W										
Fish Toxicity, 96-hr. TL_{50} % Survival in undiluted waste													
Ammonia Nitrogen (mg/l & kg/day)													
Nitrate Nitrogen (mg/l & kg/day)													
Nitrite Nitrogen (mg/l & kg/day)													
Total Organic Nitrogen (mg/l & kg/day)													
Total Phosphate (mg/l & kg/day)													
Turbidity (Jackson Turbidity Units)													
pH (units)													
Dissolved Oxygen (mg/l and % Saturation)	W								W				
Temperature (°C)													
Apparent Color (color units)													
Secchi Disc (inches)													
Sulfides (if DO < 5.0 mg/l) Total & Dissolved (mg/l)	W								W				
Arsenic (mg/l & kg/day)													
Cadmium (mg/l & kg/day)													
Chromium, Total (mg/l & kg/day)													
Copper (mg/l & kg/day)													
Cyanide (mg/l & kg/day)													
Silver (mg/l & kg/day													
Lead (mg/l & kg/day)													

TABLE I (continued)
SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

Sampling Station	E-001		E-001-D		All L Sta.		All P Sta.		R				
TYPE OF SAMPLE	Grab		Grab		Observation		Observation		Grab				
Mercury (mg/l & kg/day)													
Nickel (mg/l & kg/day)													
Zinc (mg/l & kg/day)													
PHENOLIC COMPOUNDS (mg/l & kg/day)													
All Applicable Standard Observations					W(1)		W		W				
Bottom Sediment Analyses and Observations													
Total Identifiable Chlorinated Hydrocarbons (mg/l & kg/day)													

(1) Observations shall include evidence of seepage outside reclaimed wastewater application area.

LEGEND FOR TABLE

TYPES OF SAMPLES

G = grab sample
C-24 = composite sample - 24-hour
C-X = composite sample - X hours (used when discharge does not continue for 24-hour period)
Cont = continuous sampling
DI = depth-integrated sample
BS = bottom sediment sample
O = observation

TYPES OF STATIONS

I = intake and/or water supply stations
A = treatment facility influent stations
E = waste effluent stations
C = receiving water stations
P = treatment facilities perimeter stations
L = basin and/or pond levee stations
B = bottom sediment stations
G = groundwater stations

FREQUENCY OF SAMPLING

E = each occurence
H = once each hour
D = once each day
W = once each week
M = once each month
Y = once each year

2/H = twice per hour
2/W = 2 days per week
5/W = 5 days per week
2/M = 2 days per month
2/Y = once in March and once in September
Q = quarterly, once in March, June, Sept. and December

2H = every 2 hours
2D = every 2 days
2W = every 2 weeks
3M = every 3 months
Cont = continuous